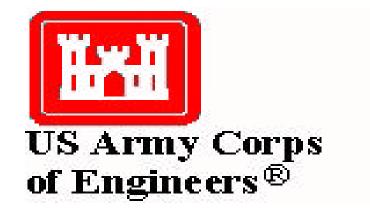
Laboratories for the 21st Century







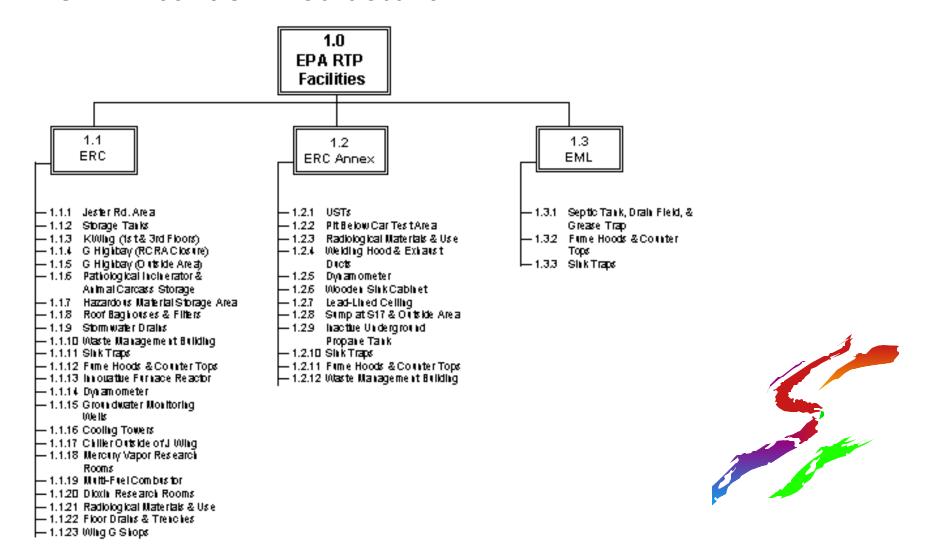
- Environmental Protection Agency
 - Russ Kulp, Program Manager
 - Tom Ward, Quality Assurance Coordinator
- US Army Corps of Engineers
 - Bob Keistler, Project Manager
 - Phil Payonk, Quality Assurance Coordinator
- Booz Allen Hamilton
 - Christine Millard, Project Manager
 - Eddie Smith, Waste Management Coordinator
- Shaw Environmental and Infrastructure
 - Randy Rogers, Project Manager
 - Tom Mattis, Ph.D, Risk Assessment Specialist

Project Background

- New Research and Administrative Facility
- Vacating 4 office and 3 laboratory leased facilities
 - ERC Building, 500,000 sf
 - ERC Annex, 153,000 sf
 - EML Building, 9,000 sf
- RTP EDDP began 1997
 - Phase I
 - Phase II
 - Phase III



■ Work Breakdown Structure



- Regulated Laboratory Issues
 - USTs
 - Permits
 - RCRA
 - Air
 - NRC license



- Non-Regulated Laboratory Issues
 - Fume Hoods & Countertops
 - Site-Specific Risk Assessment
 - Sink Traps & Drains
 - Hg
 - Filtration Systems
 - Remove Filters, Clean Housing
 - Sumps
 - Don't Overlook Potential Wastewater Issues

- Additional Project Considerations
 - Documentation
 - Waste Management
 - QA/QC
 - Costs
 - Schedule
 - Closeout
 - Dynamic Process



Lesssons Learned

- Planning is critical
- Sample with a purpose
- Overestimate time and cost
- Plan your closeout early
- Involve stakeholders

